General

Guideline Title

Elective and risk-reducing salpingo-oophorectomy.

Bibliographic Source(s)

American College of Obstetricians and Gynecologists (ACOG). Elective and risk-reducing salpingo-oophorectomy. Washington (DC): American College of Obstetricians and Gynecologists (ACOG); 2008 Jan. 11 p. (ACOG practice bulletin; no. 89). [82 references]

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: American College of Obstetricians and Gynecologists (ACOG). Prophylactic oophorectomy. Washington (DC): American College of Obstetricians and Gynecologists (ACOG); 1999 Sep. 7 p. (ACOG practice bulletin; no. 7).

The American College of Obstetricians and Gynecologists (ACOG) reaffirmed the currency of this guideline in 2012.

Recommendations

Major Recommendations

The grades of evidence (I-III) and levels of recommendations (A-C) are defined at the end of "Major Recommendations" field.

The following conclusion is based on good and consistent scientific evidence (Level A):

> In women ages 50 to 79 years who have had a hysterectomy, use of estrogen therapy has shown no increased risk of breast cancer or heart disease with up to 7.2 years of use.

The following recommendation is based on limited or inconsistent scientific evidence (Level B):

> Bilateral salpingo-oophorectomy should be offered to women with BRCA1 and BRCA2 mutations after completion of childbearing.

The following recommendations are based primarily on consensus and expert opinion (Level C):

> Women with family histories suggestive of BRCA1 and BRCA2 mutations should be referred for genetic counseling and evaluation for BRCA testing.
> For women with an increased risk of ovarian cancer, risk-reducing salpingo-oophorectomy should include careful inspection of the peritoneal cavity, pelvic washings, removal of the fallopian tubes, and ligation of the ovarian vessels at the pelvic brim.
> Strong consideration should be made for retaining normal ovaries in premenopausal women who are not at increased genetic risk of ovarian

cancer.
Given the risk of ovarian cancer in postmenopausal women, ovarian removal at the time of hysterectomy should be considered for these women.
Women with endometriosis, pelvic inflammatory disease, and chronic pelvic pain are at higher risk of reoperation; consequently, the risk of subsequent ovarian surgery if the ovaries are retained should be weighed against the benefit of ovarian retention in these patients.

Definitions:

Grades of Evidence

I Evidence obtained from at least one properly designed randomized controlled trial

II-1 Evidence obtained from well-designed controlled trials without randomization

II-2 Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group

II-3 Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments could also be regarded as this type of evidence.

III Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

Levels of Recommendations

The recommendations are based on good and consistent scientific evidence.
The recommendations are based on limited or inconsistent scientific evidence.
The recommendations are based primarily on consensus and expert opinion.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Ovarian cancer

Guideline Category

Counseling

Evaluation

Prevention

Risk Assessment

Clinical Specialty

Medical Genetics

Obstetrics and Gynecology

Oncology

Preventive Medicine

Surgery

Intended Users

Physicians

Guideline Objective(s)

To aid practitioners in making decisions about appropriate risk-reducing salpingo-oophorectomy
To weigh the risks and benefits of risk-reducing salpingo-oophorectomy and provide a framework for the evaluation and counseling of patients who would be candidates for this procedure

Target Population

Women at high risk of developing ovarian cancer

Interventions and Practices Considered

Risk-reducing salpingo-oophorectomy
Estrogen therapy
Genetic counseling and evaluation for BRCA testing

Major Outcomes Considered

Risk factors for ovarian cancer including genetic factors
Operative risks at the time of hysterectomy
Adverse effects of estrogen therapy

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

2008 Original Guideline

The MEDLINE database, the Cochrane Library, and the American College of Obstetricians and Gynecologists (ACOG's) own internal resources and documents were used to conduct a literature search to locate relevant articles published between January 1985 and June 2007. The search was restricted to articles published in the English language. Priority was given to articles reporting results of original research, although review articles and commentaries also were consulted. Abstracts of research presented at symposia and scientific conferences were not considered adequate for inclusion in this document. Guidelines published by organizations or institutions such as the National Institutes of Health and ACOG were reviewed, and additional studies were located by reviewing bibliographies of identified articles.

2012 Reaffirmation

The NCBI database was searched from 2008 to 2012. Committee members conducted a literature search with the assistance from the ACOG Resource Center staff who routinely perform the Practice Bulletin literature searches.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Studies were reviewed and evaluated for quality according to the method outlined by the U.S. Preventive Services Task Force.

I Evidence obtained from at least one properly designed randomized controlled trial

II-1 Evidence obtained from well-designed controlled trials without randomization

II-2 Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group

II-3 Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments also could be regarded as this type of evidence

III Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

Methods Used to Analyze the Evidence

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

2008 Original Guideline

Analysis of available evidence was given priority in formulating recommendations. When reliable research was not available, expert opinions from obstetrician-gynecologists were used. See also the "Rating Scheme for the Strength of Recommendations" field regarding Grade C recommendations.

2012 Reaffirmation

The Committee on Practice Bulletins - Gynecology met in March 2012 and reaffirmed this document. A committee member reviewed the document and new literature on the topic. The document was then reviewed by the committee and the committee agreed that it is current and accurate.

Rating Scheme for the Strength of the Recommendations

Based on the highest level of evidence found in the data, recommendations are provided and graded according to the following categories:

Levels of Recommendations

The recommendations are based on good and consistent scientific evidence.
The recommendations are based on limited or inconsistent scientific evidence.
The recommendations are based primarily on consensus and expert opinion.

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

Practice Bulletins are validated by two internal clinical review panels composed of practicing obstetrician-gynecologists generalists and sub-specialists. The final guidelines are also reviewed and approved by the American College of Obstetricians and Gynecologists (ACOG) Executive Board.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Appropriate use of salpingo-oophorectomy to decrease the risk of ovarian cancer and to avoid possible morbidities and future surgery related to benign ovarian neoplasms, endometriosis, and pelvic pain

Potential Harms

Clinical symptoms related to oophorectomy (e.g., hot flushes, vaginal dryness, irritability, mood swings). Other possible disadvantages include changes in self-image and decreased libido attributed to loss of ovarian androgen production (Estrogen therapy may relieve most of the symptoms related to oophorectomy)
Use of estrogen therapy in women ages 50 to 79 years (average age, 63 years) who have had a hysterectomy, demonstrated an increased risk of thromboembolic disease and stroke.

Contraindications

Contraindications

Contraindications

Women at very high risk of ovarian carcinoma—specifically, women with documented hereditary breast and ovarian cancer susceptibility or hereditary nonpolyposis colorectal cancer (hereditary nonpolyposis colorectal cancer [HNPCC] or Lynch syndrome)—are not candidates for ovarian preservation. Referral to a certified genetic counselor can help clarify risk of ovarian cancer in women with suggestive personal or family histories. Other contraindications to ovarian preservation include invasive ovarian or endometrial carcinomas. Malignant germ cell tumors, stromal tumors, and borderline ovarian tumors do not mandate bilateral salpingo-oophorectomy in women desiring fertility preservation.

Qualifying Statements

Qualifying Statements

These guidelines should not be construed as dictating an exclusive course of treatment or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to the institution or type of practice.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

1999 Sep (revised 2008 Jan; reaffirmed 2012)

Guideline Developer(s)

American College of Obstetricians and Gynecologists - Medical Specialty Society

Source(s) of Funding

American College of Obstetricians and Gynecologists (ACOG)

Guideline Committee

American College of Obstetricians and Gynecologists (ACOG) Committee on Practice Bulletins-Obstetrics

Composition of Group That Authored the Guideline

Not stated

Financial Disclosures/Conflicts of Interest

Not stated

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Guideline Availability

Electronic copies: None available

Print copies: Available for purchase from the American College of Obstetricians and Gynecologists (ACOG) Distribution Center, PO Box 933104, Atlanta, GA 31193-3104; telephone, 800-762-2264, ext. 192; e-mail: sales@acog.org. The ACOG Bookstore is available online at the ACOG Web site.

Availability of Companion Documents

None available

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI on January 14, 2005. This summary was updated by ECRI Institute on April 21, 2008. The currency of the guideline was reaffirmed by the developer in 2012 and this summary was updated by ECRI Institute on March 7, 2014.

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